

Sexual Abuse in Adolescent Girls and Boys with Mild Intellectually Disable

Hassan Zareei Mahmoodabadi ^{*1}, Leila Akrami ²

1. Department of Psychology, Faculty of Psychology and Educational Sciences, Yazd University, Yazd , Iran
2. Department of Psychology and Education of Children with Special Needs, Isfahan University, Isfahan, Iran

ARTICLE INFO

Original Article

Received: 28 March 2021

Accepted: 3 June 2021



Corresponding Author:

Hassan Zareei Mahmoodabadi
zareei_h@yahoo.com

ABSTRACT

Introduction: The problems of girls and boys with mild intellectually disable (MID) increases with age gradually. Due to the emerging changes, puberty is a significant period for adolescents with MID. The aim of this study to investigate sexual abuse in girls and boys with mild intellectually disable in the puberty period.

Methods: This research is a cross-sectional study. The statistical population consisted of all boys and girls with mild intellectual disabilities between the ages of 12 and 16 from exceptional public schools and their mothers in Yazd, Iran. 300 MID adolescents (150 girls and boys each) were selected by multi-stage sampling. To study sexual abuse, a self-designed questionnaire was used. The questionnaire comprised two sections. Kuder-Richardson coefficient obtained for boys and girls with MID turned out to be 0.80 and 0.84, respectively. Using frequency, percentage, and correlation coefficient ($p < 0.05$). Data were analyzed with SPSS 24.

Results: In this study, 2.67% ($n = 4$) of girls and 4% ($n = 6$) of boys with MID were abused. Also, their psychological and physical signs of sexual abuse were assessed (depression: girls, 0.75% ($n = 3$), boys, 33.33% ($n = 2$), aggression: girls, 0.75% ($n = 3$), boys, 66.66% ($n = 4$), avoiding certain adults, 0.50% ($n = 2$), boys, 33.33% ($n = 2$), sleep and eating disorder, 0.25% ($n = 1$), boys, 16.66% ($n = 1$). Some of their parents pointed that their children had not received training in this area. There was a significant positive correlation coefficient between the mother's educational level and receiving training by schools and family with sexual abuse knowledge ($p < 0.05$).

Conclusion: The irrational reaction of families, the community, and the lack of adequate training lead to an increase in sexual abuse in such individuals. Hence, training these young individuals seems essential both before and during puberty.

Keywords: Adolescence, Puberty, Mild Intellectually Disable (MID), Sexual Abuse

How to cite this paper:

Zareei Mahmoodabadi H, Akrami L. Sexual Abuse in Adolescent Girls and Boys with Mild Intellectually Disable. J Community Health Research 2021; 10(2): 128-135.

Copyright: ©2021 The Author(s); Published by Shahid Sadoughi University of Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Puberty is a stage of human growth and a natural event accompanied by hormonal changes in the body controlled by the brain. At this stage, sex organs develop, and secondary sexual characteristics emerge (1,2). In many families, girls and boys do not have enough knowledge about sexual development and characteristics related to their sex and the opposite sex (3). Lack of awareness and developmental preparedness in adolescence leads to various problems along with confusion (4,5). Among the most important characteristics of this stage are awakening sexual energy and attention to the opposite sex. The teenagers' attention to the opposite sex is not always due to sexual enjoyment; rather, it can be out of the need for kindness or praise and mature expression (6,7). Physical and sexual abuse can be observed among girls and boys across different ages, all ethnic groups, and socioeconomic levels (8). Sexual abuse includes a spectrum of forced sexual activities that usually occur for various reasons in early adolescence (ages 11 to 15 years). Sexual abuse means forcing a person to perform a sexual behavior that she does not want to do and is not able to resist physically or mentally for various reasons (9).

Most boys and girls with mild intellectually disable (MID) enter puberty and go through other developmental changes similar to normally developing individuals. In this period, the secondary sexual characteristics emerge and get activated, which is quite significant in MID adolescents. Due to low IQ, these individuals face more challenges and are deprived of educational resources requiring mental power. Additionally, they are often deprived of parental support and training to adapt to the new period (4). Therefore, the risk of being exposed to sexual abuse intensifies in such adolescents (6,10).

Studies have revealed that knowledge about sexuality in ID adolescents is less than their normal peers. They have incorrect, inappropriate, and ambiguous information about sexual issues, sexual deviations, and sexually transmitted diseases. The

reasons for their limited knowledge are their insufficient social and verbal skills (11, 12,13).

Results obtained from various studies show that the risk of sexual abuse in adolescents with ID is more than their normal peers. Children with ID are at greater risk of sexual abuse because of certain reasons such as dependency, belonging to others, naivety, and lack of knowledge on sexuality. Furthermore, most individuals with intellectual disabilities experience some form of sexual abuse in their lives (10, 11). The vulnerability factors of teenagers with intellectual disability towards sexual abuse can be grouped into three broad categories: individual, family, and community (14). Individuals with disabilities experience violence in their lives. Teenagers with an intellectual disability are not immune to sexual abuse, and more research is needed in this area (12).

Generally, children and adolescents with intellectual disability are unable to protect themselves against the abuser due to a number of reasons listed below:

Lack or limited knowledge of sexual identity and sexual role (refers to a cultural expectation on how men and women communicate with each other and Gender role is associated with sexual identity), lack of awareness of sexual issues, inability to learn the rules of society about sexual behavior, lack of exercising proper judgment , diagnosis and assessment of the annoying situations, lack of awareness of illegal nature of sexual abuse, lack of understanding the physical and psychological consequences of sexual abuse resulting from intense fear, an emotional attachment to the abuser, lack of training by family and school as the most significant cause, and inadequate ability or skill to protect themselves against the abuser (6, 15). The protective strategies should be taught to the girl adolescents with MID; otherwise, the risk of sexual abuse may increase as they get older and less relationship with parents and caregivers. Unfortunately, many educational programs encourage children and adolescents with MID to accommodate different life situations (16).

Dionne & Dupras, 2014, point out that intellectually disabled individuals should be trained on preventing pregnancies, sexual harassment and, Sexually transmitted diseases. Their intellectual restrictions make them vulnerable to these dangers (17).

In a study conducted by Soylu *et al.*, 2013 it was revealed that the group with ID had different sexual abuses, including penetration and contact. The abuses were confirmed through their reports at a later period with a lower rate. Also, post-abuse pregnancies were more frequent (18).

Sexual abuse may be diagnosed hardly, and there is often no conclusive evidence to confirm it (19). Such symptoms include wounds, bruising and discomfort in the limbs or genitals, torn or missing clothes, sexually transmitted infections, bone fracture, ecchymosis, pain and itching in the genital area, bleeding in anus or vagina, frequent urinary infections, abdominal pain as well as difficulty in walking and sitting. The above cases should arouse suspicion of sexual abuse (20).

Sexual abuse results in certain physical, behavioral and mental disorders. Sexual abuse leaves large effects on the lives of young people with ID and can lead to permanent post-traumatic stress disorder (PTSD) (21,22). Such individuals may experience fear, anger, sleepwalking, loss of interest in previous favorite activities, depression associated with shame, guilt, a sense of permanent harm, isolation, avoidance of certain environments or people, continuous crying, eating disorders, and academic failure, among others (8, 23, 24).

Research findings indicate that adolescents with MID have limited information about sexual issues and cannot recognize proper from improper requests making them more susceptible to sexual abuse (25). To make MID adolescents aware of private space, we should hold self-defense classes in schools to provide the necessary training. The continued growth of self-esteem and interpersonal skills can evoke positive feelings for adolescents. Additionally, being exposed to emotional support from family and friends enables them to feel that they can protect themselves and their rights (26).

Therefore, it is important to pay attention to sexual abuse in adolescents with the intellectually

disabled. Given the importance of sexual abuse in puberty, the aim of this study was to determine sexual abuse among mild intellectually disabled teenagers in puberty. The following questions will be examined:

First question: How many adolescent girls and boys with mild intellectually disabled were sexually abused?

Second question: What are the symptoms and consequences of sexual abuse in girls and boys with mild intellectually disabled who were sexually abused?

Methods

The present study was a descriptive cross-sectional, study that was carried out in Yazd, Iran. The purposes of this research were to examine the prevalence and symptoms of sexual abuse in girls and boys with mild intellectual disability (MID) in puberty.

The statistical population consisted of all boys and girls with mild intellectual disabilities between 12 and 16 from exceptional public schools and their mother, Yazd, Iran. The research sample included 150 girls and 150 boys with mild intellectual disabilities (MID), who were selected through cluster sampling with the formula: $p=0.12$, $d=0.2P$ and $\alpha=0.05$ (27).

$$n = \frac{z^2 p(1-p)}{d^2}$$

To select samples, of each region, one school of students with MID was selected, then from each school, the number of classes and then number of students were selected randomly. Inclusion criteria contains of students (boys and girls) with mild intellectually disabled, IQ=50-70 (with WISC-IV), and 12-16 years old, who had not experienced precocious puberty.

Research tool

To assess sexual abuse in girls and boys with MID a self-designed questionnaire was used, and it comprised two sections. The first section was on the participants' biodata, including the adolescent's age, the family's income, the average educational scores, the number of family members, and the mother's educational level. The second section

consisted of the 15-item questionnaire about sexual abuse knowledge (meanings and signs of sexual abuse, get training, identify situations where there is a possibility of sexual abuse and defense skills) of boys and girls with MID and 35 dichotomous questions probing symptoms of sexual abuse in the two gender groups. The questionnaires were completed by the participants who merely provided a 'yes' or 'no' response coded as 1 or 0.

The validity of the questionnaire was established through content validity measured by Lawshe's method. This method is among the quantitative methods of content validity. The questionnaire items were first examined by several university professors and experts in the field. Then, the index for content validity ratio (CVR) was calculated for each individual item through the following formula, and finally, the required modifications were made. In this study, using the Spearman correlation coefficient, the reliability was obtained through a test-retest method with a 2-week interval for both groups. The coefficients obtained for boys and girls were $r = 0.81$ and $r = 0.83$, respectively, and the values were significant at $\alpha = 0.05$ level. To determine the internal consistency, the Kuder-Richardson formula was used. In this method, the internal consistency of the whole test is examined, taking into account all items of the test. Using the Kuder-Richardson coefficient, the obtained coefficients for boys and girls with MID turned out to be 0.80 and 0.84, respectively.

The purpose of the research was explained to the subjects by the researchers. The participation of the samples was voluntary and their response was confidential.

The questionnaires were given to the students' mothers, followed by some clarifications on the objectives and significance of the research and the method of answering the questionnaire items. The section on sexual abuse knowledge was completed by boys and girls with MID along with the guidance of the researcher. With the help of researchers and an individually 15-item of the questionnaire about sexual abuse knowledge completed by teenagers. To complete the questionnaire by adolescents, the questions were stated simply and understandably by

the researchers. It is worth mentioning that in cases of experiencing sexual abuse, the mothers were asked to answer the items related to sexual abuse symptoms.

All statistical assessments were frequency, percentage, Spearman correlation coefficient, and ($P < 0.05$) was considered significant. The data were analyzed using SPSS statistical software (version 24).

Results

about 45% ($n=67$) of the subjects were boys, while 40% ($n=60$) were girls with MID at the age of 13. About 43.33% ($n=65$) of the boys' mothers and 41.33% ($n=62$) of the girls' mothers had a high school certificate. Also, 60% ($n=90$) of the boys' parents and 55.34% ($n=83$) of the girls' parents pointed out that their children had not received any training on sexual abuse by family and schools. Table 1 shows the number of people who have been sexually abused.

Table 1. Frequency of sexual abuse in girls and boys with mild intellectually disabled

| sexual abuse | | |
|--------------|-----------|---------|
| percent | frequency | percent |
| 2.67 | 4 | 2.67 |
| 4 | 6 | 4 |

In response to the first research question, results show that (table 1), 2.67% ($n=4$) of the girls and 4% ($n=6$) of the boys were sexually abused in different ways, and they had not received any training on sexual abuse by family and schools.

In response to the second research question, table 2 depicts the symptoms of sexual abuse in girls and boys with MID that were sexually abused (Girls: $n = 4$, Boys: $n = 6$).

Results show that (Table 1), the symptoms include (depression, isolation, anxiety, aggression, avoiding certain environments, avoiding certain adults, continuous crying, sleep and eating disorder, sudden academic failure, and sexually inappropriate behavior) are visible to girls and boys who have been abused. Table 3 depicts the correlation coefficient between sexual abuse knowledge and demographic information.

Table 2. Symptoms and consequences of sexual abuse in girls and boys with mild intellectually disabled were sexually abused

| Symptoms and Consequences | Girls (n = 4) | | Boys (n = 6) | |
|-----------------------------------|---------------|-------|--------------|-------|
| | N | % | N | % |
| Wounds and bruises around genital | 0 | 0 | 0 | 0 |
| Discomfort in the genital area | 0 | 0 | 0 | 0 |
| Sexually transmitted disease | 0 | 0 | 0 | 0 |
| Bone fracture | 0 | 0 | 0 | 0 |
| Depression | 3 | 0.75 | 2 | 33.33 |
| Isolation | 4 | 0.100 | 3 | 0.50 |
| Anxiety | 4 | 0.100 | 6 | 0.100 |
| Aggression | 3 | 0.75 | 4 | 66.66 |
| Avoiding certain environments | 2 | 0.50 | 3 | 0.50 |
| Avoiding certain adults | 2 | 0.50 | 2 | 33.33 |
| Continuous crying | 1 | 0.25 | 0 | 0 |
| Sleep disorder | 1 | 0.25 | 1 | 16.66 |
| Eating disorder | 1 | 0.25 | 1 | 16.66 |
| Resistance to doctor | 0 | 0 | 0 | 0 |
| Self-destructive behavior | 0 | 0 | 1 | 16.66 |
| Sexually inappropriate behavior | 2 | 0.50 | 3 | 0.50 |
| Sudden academic failure | 3 | 0.75 | 4 | 66.66 |

Table 3. Correlation Coefficient between sexual abuse knowledge and demographic information in girls and boys with mild intellectually disabled

| Variable | Girls | | Boys | |
|-------------------------------|-------------------------|---------|-------------------------|---------|
| | Correlation coefficient | p-value | Correlation coefficient | p-value |
| Family's income | 0.39 | 0.61 | 0.37 | 0.68 |
| Number of family members | 0.35 | 0.77 | 0.31 | 0.82 |
| Receiving training by schools | 0.74 | 0.015* | 0.68 | 0.023* |
| Receiving training by family | 0.81 | 0.002* | 0.85 | 0.001* |
| The mother's education level | 0.77 | 0.010* | 0.72 | 0.014* |

As can be seen from Table 2, there was not a significant correlation coefficient between sexual abuse knowledge and some demographic information (Family's income and Number of family members). There was a significant positive correlation coefficient between the mother's educational level (girls, $p=0.010$, boys, $p=0.014$), receiving training by schools (girls, $p=0.015$, boys, $p=0.023$) and family (girls, $p=0.002$, boys, $p=0.001$) with sexual abuse knowledge ($p<0.05$).

Discussion

This study observed the prevalence and symptoms of sexual abuse in girls and boys with MID, and it was found that most adolescents with ID not receiving training from families and schools about sexual abuse. There was a significant correlation between receiving training by schools and families with sexual abuse knowledge.

The physical and psychological effects of sexual abuse can have lasting and devastating effects on any individual. Different factors such as the mental immaturity of adolescents with MID, failure to receive adequate training on sexual issues, failure to appropriately understand others' views and intentions, and the improper interactions with their parents can induce sexual abuse in them compared to normal adolescents (28,29, 30). Many people wrongly assume that the changes in the puberty period do not hold for girls and boys with MID, and consequently, no sexual orientation can be observed. Nonetheless, these changes are associated with hormone secretion (6). Most girls and boys with MID do not learn how to control their sexual desires leading to their ignorance of many of the ethical principles and approved standards of society. There are a large number of observed cases in which these individuals are at risk of being ridiculed by others in family

parties, streets, neighborhoods, and their care homes (6,19). Mothers are often concerned about their children's social behavior and the way they greet and respect others. They believe that the improper awkward behavior of adolescents with ID can increase the risk of sexual abuse. Hence, training such individuals to prevent sexual abuse should be regarded as a lifelong education for girls and boys with MID and accorded a proper significance in their educational programs (31,32). Sexual abuse has both short-term and long-term consequences. Behavioral disorders, enuresis, anxiety, depression, withdrawal, and academic failure can be seen in these people. Therefore, teaching various self-protection behaviors to adolescents with ID is necessary (10).

Some of the problems and sexual demonstrations can provide grounds for abusing intellectually disabled teens. For instance, some MID adolescents display a strong desire and passion toward the opposite sex leading to their parents' concerns in the majority of cases. Impairments in social skills and lack of adequate training lead to inappropriate behavior when facing the opposite sex. The results of certain studies reveal some problems such as unusual behavior in front of the opposite sex and sexual adventurism leading to serious concerns on the part of their parents (20,3). The researches indicate that such inappropriate behavior in public places, along with inadequate training, can increase sexual abuse in adolescents with MID (21, 22).

Improving social skills, emotional support, training on sexual issues, and awareness of privacy in sexual matters can play an influential role for ID adolescents. If social skills to be trained, adolescents with MID leads to correct behavior, also increase the awareness of these adolescents and receive education from the family, reduces sexual abuse (33,34). As the rate of sexual abuse increases during the puberty period, training seems essential (25,35,36). Research shows that children and adults with disabilities are more sexually harassed than the

general population and more vulnerable to violent crime (37, 38).

Having a deep knowledge of adolescent characteristics help parents and educators have a better understanding of the adolescents leading to a more logical behavioral pattern consistent with their psychological status. Lack of proper emotional relationships among family members can provide grounds for the sexual abuse of children. In these families, the probability of seeking refuge in their peer groups and having a more friendly relationship with adults and strangers seem high. Such a situation has led to sexual abuse of adolescents in many instances. Many parents think that education is not necessary for adolescents with MID in puberty, or they are not familiar with the correct teaching strategies for these teenagers. Thus, sexual abuse increases and leads to various psychological consequences. Therefore, it is necessary to increase parental awareness to prevent sexual abuse of adolescents with MID (12,30).

This study can show that the importance of educating adolescents with MID and their families to prevent sexual abuse. One of the most important limitations of this research was that some parents might have preferred not to reveal anything about their children's sexual abuse. Because Iran is a vast country with different cultural and educational statuses, our sample may not be representative of all boys and girls with MID and their families during puberty in Iran.

Conclusion

It is difficult to find resources that are understandable, realistic, and concrete enough to explain the teaching requirements of boys and girls with MID and their families during puberty. Usually, people with MID receive too little information about sexual abuse during puberty. National efforts to reduce sexual violence must consider how to address the unmet needs of children and adolescents with disabilities. It is necessary, further research on sexual abuse and prevention strategies in girls and boys with ID

during the puberty period among both the family and society.

Acknowledgments

The authors would like to thank the mothers of the boy and girls with MID for their kind cooperation.

Ethical considerations

The Ethics Committee of the Isfahan University, Isfahan, Iran, approved the protocol of this study

(code number: IR.UI.REC.1398.092). Written informed consent will take from each participant.

Authors' contribution

The main idea of researching was with H.Z.M, the collecting and analyzing data was with L.A, and concluding with both authors. All authors read and approved the final manuscript.

Conflicts of Interests

The authors declare no conflict of interest.

References

1. Noll GJ, Trickett PK, Long GD, et al. Childhood Sexual Abuse and Early Timing of Puberty. *Journal of Adolescent Health*. 2016; 60(1): 65-71.
2. Almeida FL, Lopes JS, Crescencio R, et al. Early puberty of farmed tambaqui (*Colossoma macropomum*): Possible influence of male sexual maturation on harvest weight. *Aquaculture*. 2016; 452: 224–232.
3. Blaustein JD, Ismail N, Holder MK. Review: Puberty as a time of remodeling the adult response to ovarian hormones. *Journal of Steroid Biochemistry & Molecular Biology*. 2016; 160: 2–8.
4. Couwenhoven T. Teaching children with down syndrome about their bodies, boundaries, and sexuality: A guide for parents and professionals. Woodbine House. 2007.
5. Mackin ML, Loew N, Gonzalez A, et al. Parent Perceptions of Sexual Education Needs for Their Children With Autism. *Journal of Pediatric Nursing*. 2016; 31(6):608–618.
6. Davarmanesh A. Education and rehabilitation for child with mental retardation. Tehran, Iran: University of Social Welfare and Rehabilitation Sciences (USWRS) Publication. 2003. [Persian]
7. Lasingame GD, Creedon K, Rich P. Assessment and Treatment of Adolescents with Intellectual Disabilities Who Exhibit Sexual Problems or Offending Behaviors. Association for the Treatment of Sexual Abusers. Available from www.atsa.com. 2015
8. Satapathy S, Choudhary V, Sagar R. Tools to assess psychological trauma & its correlates in child sexual abuse: A review & current needs in Asia. *Journal of Asian Psychiatry*. 2017; 25:63-70.
9. Eastgate G. Sex and intellectual disability-dealing with sexual health issues. *Australian family physician*. 2011; 40(4):188-91.
10. Wissink IB, Vugt EV, Moonen X, et al. Sexual abuse involving children with an intellectual disability (ID): A narrative review. *Research in Developmental Disabilities*. 2015; 36: 20–35.
11. Maksym D, Roehner A. The material in this brochure was reprinted in part and with permission from: “Shared Feelings, A Parent’s Guide to Sexuality Education for Children, Adolescents and Adults Who have a Mental Handicap”, Institute, North York, Ontario, Canada. 1990
12. Phasha N. Sexual Abuse of Teenagers with Intellectual Disability: An Examination Of South African Literature. *Social and Behavioral Sciences*. 2012; 69: 1693 – 1699.
13. Stockburger S, Omar H. Women with Disabilities: Reproductive Care and Women’s Health. Pediatrics Faculty Publications. *International Journal of Child Health and Human Development*. 2015; 8(4):429-447.
14. Phasha TN, Myaka LD. Sexuality and sexual abuse involving teenagers with intellectual disability: Community conceptions in a rural village of KwaZulu-Natal, South Africa. *Sexuality and Disability*. 2014; 32(2): 153-165.
15. Baxley D, Zendell A. Sexuality Education for Children and Adolescents with Developmental Disabilities an Instructional Manual for Parents or Caregivers of and Individuals with Developmental Disabilities. Sponsored by the United States Department of Health and Human Services, Administration on Developmental Disabilities and the Florida Developmental Disabilities Council, Inc. First Edition; 2005.
16. Kim YR. Personal Safety Programs for Children with Intellectual Disabilities. *Education and Training in Autism and Developmental Disabilities*. 2010; 45(2): 312–319.

17. Dionne H, Dupras A . Sexual health of people with an intellectual disability: An ecosystem approach. *Sexologies*. 2014; 23(4):e85—e89.
18. Soylu N, Alpaslan AH, Ayaz M, et al. Psychiatric disorders and characteristics of abuse in sexually abused children and adolescents with and without intellectual disabilities. *Research in Developmental Disabilities*. 2013; 34(12): 4334–4342.
19. Sadock B, Sadock VA (1933) *Synopsis Of Psychiatry*. ISBN:978-964-176-2.2005
20. Adams MK. *Developing the CycleSmart™ Kit: Increasing puberty knowledge and fertility-awareness among very young adolescents in Rwanda*. The Institute for Reproductive Health (IRH). 2013.
21. Kim C, Vance YJ, Robinson LA, et al. Maternal Child Sexual Abuse Is Associated With Lower Maternal Warmth Toward Daughters but Not Sons. *Journal of child sexual abuse*. 2016; 25(8):813-826.
22. Nichols SH, Moravcik MG, Tetenbaum SP. *On The Autism Spectrum (What Parents and Professionals Should Know About the Pre-Teen and Teenage Years)*. Jessica Kingsley Publishers London and Philadelphia. 2009
23. López S, Faro C, Lopetegui L, et al. Impacto del abuso sexual durante la infancia-adolescencia en las relaciones sexuales y afectivas de mujeres adultas. *Gaceta Sanitaria*. 2017; 31: 210-9.
24. Shawna L, Chapman C, Wu LT. Substance abuse among individuals with intellectual disabilities. *Research in Developmental Disabilities*. 2012; 33(4) : 1147–1156.
25. Rand M, Harrell E. *National crime victimization survey: Crime against people with disabilities*. Washington, DC: Office of Justice Programs, US Department of Justice. 2009.
26. Doughty AH, Kane LM. Teaching abuse-protection skills to people with intellectual, disabilities: A review of the literature. *Research in Developmental Disabilities*. 2010; 31(2): 331–337.
27. Khoramdad M, Gholami F, Alimohamadi Y, et al. Prevalence of Lifetime Smoking and Its Determinant Factors in High School Adolescents in Shiraz . *Journal of Community Health Research*. 2016; 5 (2) : 90-97.
28. Orange LM, Brodwin MG. Assessment and treatment of children with disabilities who have been abused. In L. Vandecreek & J. B. Allen (Eds.), *Innovations in clinical practice: Focus on health and wellness* 131-142, Sarasota, FL: Professional Resource Press.2005
29. Mansell S, Sobsey D, Calder P. Sexual abuse treatment for persons with developmental disabilities. *Professional Psychology, Research and Practice*. 1992; 23(3): 404-409.
30. McCormack B, Kavanagh D, Caffrey S, et al. Investigating sexual abuse: Findings of a 15- year longitudinal study. *Journal of Applied Research in Intellectual Disabilities*. 2005;18(3):217-227.
31. Lumley VA , Miltenberger RG. Sexual abuse prevention for persons with mental retardation. *American Journal on Mental Retardation*. 1997;101(5):459-472.
32. Manders JE, Stoneman Z. Children with disabilities in the child protective services system: an analog study of investigation and case management. *Child Abuse & Neglect*. 2009;33(4): 229-237.
33. Cederborg AC, Lamb M. Interviewing alleged victims with intellectual disabilities. *Journal of Intellectual Disability Research*. 2008;52(1): 49-58.
34. Cederborg AC, Danielsson H, La Rooy D, et al. Repetition of contaminating question types when children and youths with intellectual disabilities are interviewed. *Journal of Intellectual Disability Research* .2009;53(5): 440-449.
35. Edinburgh L, Saewyc E, Levitt C. Caring for young adolescent sexual abuse victims in a hospital- based children’s advocacy center. *Child Abuse & Neglect*. 2008; 32(12):1119-1126.
36. Alriksson-Schmidt AI, Armour BS, Thibadeau JK. Are adolescent girls with a physical disability at increased risk for sexual violence? *Journal of School Health*. 2009; 80(7): 361-367.
37. Aker TH, Johnson MS. Sexual abuse and violence against people with intellectual disability and physical impairments: Characteristics of police-investigated cases in a Norwegian national sample. *Journal of applied research in intellectual disabilities*. 2019; 33(2):139-145.
38. Taylor J, Stalker K., Stewart A. (2016). Disabled children and the child protection system: a cause for concern. *Child Abuse Review*. 2015; 25(1): 60– 73.